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GIFTED EDUCATION:

Making a Positive Difference

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September 1997



DEPARTMENT OF ELEMENTARY & SECONDARY EDUCATION

P.O. BOX 480
JEFFERSON CITY, MISSOURI 65102-0480

September 1997

Dear Friends:

The goal of helping each child achieve his or her potential continues to be the priority of the Department of Elementary and Secondary Education. The Missouri School Improvement Program, The Show-Me Standards, curriculum frameworks, and state performance assessment system provide guidance and resources for school districts to achieve this goal for all its students.

Since 1974, the special needs of gifted children have been taken into consideration. Existing programs are expanding to serve more grade levels and new programs are being started. Innovative approaches have been implemented in school districts both big and small. Pilot projects regarding the identification of underrepresented populations, low socioeconomic gifted students, the highly gifted child, and primary gifted children are in place and thriving. The state-assisted gifted program continues to be one source to help school districts offset the costs associated with operating a program. Other funding sources include Line 14 monies, which target at-risk populations, Title VI funds, formerly Chapter 2, and Professional Development funds to provide teacher inservice on the topic of gifted students.

Public school districts in Missouri are encouraged to incorporate gifted education services into their school improvement plans. The Missouri School Improvement Program includes the identification and service of gifted students in Standard 8.2. Gifted education services are not extra curricular, a reward for good work or behavior, or just something fun to do if a child finishes class work early. These services should be based on student ability and an integral part of the instructional programs offered in a school district. The gifted education program is an educational intervention designed to meet the academic, social, and emotional needs of a small percentage of a school's population.

The staff of the Gifted Education Section are striving to help districts provide more and better services to meet the unique academic, social and emotional needs of all gifted children in the state. It is our hope that this document will assist you in beginning or improving the services provided to the gifted children in your school district.

Good wishes.

Sincerely,

A handwritten signature in black ink that reads "Robert E. Bartman". The signature is written in a cursive style with a large, stylized "R" and "B".

Robert E. Bartman
Commissioner of Education

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PURPOSE

The purpose of this publication is to provide Missouri school districts with information that may assist them in improving or beginning the delivery of service for children who are identified as gifted.

The focus is on strategies that can best meet the unique needs of gifted children using a variety of service options, reaching as many identified gifted children as possible, and utilizing school districts' resources as efficiently as possible.

Exemplary and best practices as supported by current research in the field are cited.

BACKGROUND ON GIFTED CHILDREN

The U.S. Department of Education's report, *National Excellence: A Case for Developing America's Talent* (1993), describes a "quiet crisis" concerning the education of gifted youth in America. Gifted students across the country, including Missouri, are not being sufficiently challenged to reach their full potential. In many publications, most of the concern regarding the failure of students in education has referred to those described as at risk of failure due to low achievement. This has generally not included those students who are gifted, as it is a common misconception that these children will do well in school with little or no help.

Gifted children represent approximately the top 3-5% of the total school population (Marland, 1972). The national definition of gifted is "children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared to others of their age, experience, and environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess and unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor (National Excellence)."

The crisis in relation to the gifted is "quiet" due to the lack of discussion about it. Gifted children are also at risk of failure in many school settings. Inadequate educational opportunities, untrained or undertrained staff, and the perception that the gifted will fare well on their own have created an atmosphere of indifference when it comes to gifted children.

In all classrooms a continuum of abilities will be represented. There will be children who operate at or close to what is expected for students in their grade level. There will be children who will perform above and below expected levels of achievement. There will be children who are far enough below grade level that they require educational interventions to assist them in achieving their potential. And there will be children who are far enough above grade level that they, too, require educational interventions to help them achieve their potential. It is in this latter category that the gifted child dwells, and on whom we focus our attention.

A national survey revealed that teachers gave the same assignment to all students regardless of abilities most of the time and that there was little to no differentiation of curriculum in the regular classroom (Westburg, Archambault, Jr., Dobyns, & Slavin, 1993). The point at which curriculum is challenging but achievable is called a child's "instructional level." The point at which the material presented is too difficult for a child is referred to as the child's "frustration level." It is not educationally sound to expect a

child to complete work that is above his or her instructional level. However, gifted children have an additional frustration level which occurs when material presented is too easy for them. This happens frequently in classrooms where one lesson is presented to the entire class without regard for ability level. Gifted children in this situation often already know the information, or learn it quickly, and do not need the drill and repetition required of many classroom assignments.

The state of Maryland reviewed its gifted education programs and designed 10 Key Questions and recommendations for programming. Key Question Four is, "How should schools identify the needs of gifted and talented students and provide for an appropriate range of services to meet those needs?" One of the recommendations refers to challenging curriculum. Curricula should be developed and structured to provide rigor and challenge for all students, including the gifted. Emphasis should be placed on the development of integrated curricula, using an inquiry approach, and the curricula should include accelerated and enriched content that promotes higher levels of thinking. "Bright students respond to rigorous content and need comprehensive high-level K-12 learning opportunities" (Renewing Our Commitment, 1993).

It is generally agreed that gifted children learn faster, absorb more information, and process information differently than typical children of the same age (Colangelo and Davis, 1997). These children benefit from opportunities to interact with students of like ability without regard to age or grade levels. "The artificial lock-step of education (kindergarten through graduate school in discrete units and in pre-defined progression) should give way to a system in which a child's progress is determined by differing levels of performance in the particular subject area" (Renewing Our Commitment).

One of the most frequent charges against special programs for gifted youth is that there is no research to support them (Robinson, 1992). This is far from the truth. A group of researchers in the field of gifted education reviewed 100 textbooks and research articles on gifted education to identify 101 "recommended practices." These recommendations are specific pieces of advice in the form of "do," "don't," and "should" statements, and are reflective of the considered advice of experts and persons actively involved in the field (Robinson, 1992). Many of those practices are included here. They may be found in their entirety in the book Recommended practices in gifted education: A critical analysis, (1991), James Borland, Editor.

Schools in America should be in the business of educating all students to reach their potential. Children of all levels of ability can learn, and it is the job of the schools to help them achieve. All educators want students to strive for excellence and should be prepared to lead them down the right path to lifelong learning. Society loses when any child is not able to live up to his or her potential. The wasted potential of a gifted child is possibly the loss of a cure, an invention, or a world leader. In order to help the gifted child achieve his or her potential, options must be chosen that "fit" the individual child's needs and should be incorporated into that child's school experiences.

CHARACTERISTICS OF GIFTED LEARNERS

There are certain characteristics or behaviors that are indicators of giftedness. Not all gifted children will exhibit every characteristic and some gifted children will not exhibit any consistently. Some common characteristics of gifted students are:

- * superior reasoning powers
- * persistent intellectual curiosity
- * wide range of interests
- * markedly superior in quality or quantity of written and/or spoken vocabulary
- * reads avidly and absorbs books well beyond his or her years
- * learns quickly and easily and retains what is learned
- * shows insight to arithmetical problems that require careful reasoning and grasps mathematical concepts readily
- * has a keen sense of humor
- * sets high standards for self
- * gets excitement and pleasure from intellectual challenge (Giftedness, 1990).

All children may exhibit these traits. Gifted students possess these characteristics to a much greater extent than do other students of the same age, background, and experience. Gifted students also exhibit them in a more consistent manner and to a degree that they require modifications to their educational plan for further development to occur.

The characteristics noted above are not always exhibited positively. These students are not always the "teacher pleasers," good students who get straight A's and behave in the classroom. A child who is highly verbal may talk constantly, use language to show off or gain attention, or use inappropriate language. A curious child may be unable to focus on a task or assignment chosen by the teacher. An idealistic child may question decisions and directions made by the teacher. When these students' unique needs aren't met in the classroom, they often do poorly academically, although they have the ability to do well, and they often misbehave. Teachers and parents can misinterpret the bad behavior and fail to recognize the underlying reason for it—frustration or boredom.

ASSESSMENT

Gifted children are found in all segments of society including all socioeconomic backgrounds, geographic areas, and cultural backgrounds, and in children with other special needs. Gifted children are as different from each other as they are from the typical child. Despite the trend toward a more inclusive definition of giftedness, an individual measure of intelligence is often the "single definitive criterion" for identification (Hunsaker, 1994).

Limitations of a single test of cognitive ability should be recognized. "If the identification criteria for a program for the gifted is based primarily on a single test, the population of gifted students identified will vary greatly depending upon which test is used (Wood and Carri, 1991)." No single test or method of identification will identify all children's abilities.

Individually administered intelligence tests should be used. Although they are more expensive, they are appropriate to allow students to demonstrate what they know and can do if other factors indicate possible giftedness (Wood and Carri). Gallagher (1983) suggests the use of other types of information in addition to an individual intelligence test score, such as teacher nominations, achievement test scores, previously demonstrated accomplishments, and scores on measures of creativity. A multiple criteria approach places less emphasis on performing well on a single test and, therefore, should be utilized in identifying gifted children in order to make placement decisions. "There is consensus that there are attributes of giftedness—traits, characteristics, and behaviors that are universally associated with gifted potential...and specific behaviors and cultural contexts that represent different manifestations of gifted potential and performance as a consequence of the social and cultural contexts in which they occur (Frasier, 1989)."

Identification procedures typically include those listed above; individual intelligence test scores, norm-referenced achievement test scores, previously demonstrated accomplishments, teacher observation and nomination, scores on tests of creativity, and/or group intelligence test scores. The various, and possibly negative, manifestations of giftedness can make it difficult to recognize a child's high abilities in a regular academic setting, causing gifted children to remain unidentified and unserved.

"The populations that are underidentified and underserved include children who are characterized by racial/ethnic cultural group membership (e.g., African Americans, Hispanics, and Native Americans); by language differences or limitations (e.g., mother tongue other than English or limited English speaking); by low socioeconomic status (e.g., qualifying for poverty-level subsistence or free or reduced price meals); and by geographic location (e.g., rural or inner city areas, barrios, or reservations). New models or paradigms are needed that respond to these [issues]¹ by focusing on gifted behaviors in a cultural context, designing dynamic approaches to assessing gifted behaviors within the students' sociocultural context, and integrating identification processes with learning opportunities (Passow and Frasier, 1996)".

Schools must develop a system to identify children in need of the gifted education services that the district provides. Screening criteria should be as inclusive as possible. Identification criteria and test instruments should be chosen that will maximize the students' strength and limit the effects of any possible biases (limited English proficiency, culturally diverse background, etc.). Districts should consider their demographics when creating a menu of comparable test instruments that will be acceptable for

identification of giftedness. According to the National Excellence report, a defensible identification plan:

1. seeks variety—looks throughout a range of disciplines for students with diverse abilities,
2. uses many assessment measures—uses a variety of appraisals so that schools can find students in different talent areas and at different ages,
3. is free of bias—provides students of all backgrounds with equal access to appropriate opportunities,
4. is fluid—uses assessment procedures that can accommodate students who develop at different rates and whose interests may change as they mature,
5. identifies potential—discovers talents that are not readily apparent in students, and
6. assesses motivation—takes into account the drive and passion that play a key role in accomplishment.

E. Suzanne Richert (1997) designed six principles of identification used in the Academic Programs for the Gifted with Excellence and Equity (APOGEE). These principles are:

1. *Defensibility*: procedures should be based on the best available research and recommendations,
2. *Advocacy*: Identification should be designed in the best interests of all students,
3. *Equity*: Procedures should guarantee that no one is overlooked. The civil rights of students should be protected. Strategies should be specified for identifying the disadvantaged. (High scores should be used to include students, but if students meet multiple criteria- through performance or nominations, for example- then one single test score should not be used to exclude a student from participation),
4. *Pluralism*: The broadest defensible definition of gifted should be used,
5. *Comprehensiveness*: As many learners with gifted potential as possible should be identified and served, and
6. *Pragmatism*: Whenever possible, procedures should allow for cost-effective modification of and use of available instruments and personnel.

"Giftedness appears in many different forms in every cultural group at every level of society... Yet, it remains a potentiality until it has been discovered and developed. In coming to grips with more effective approaches to identify [giftedness], the promise is that educators will better understand how to identify and nurture the potential of all learners (Passow and Frasier)."

PROGRAM GOALS AND OBJECTIVES

Nationwide, a call has been issued to raise the academic performance of all students. Workers of the future will be expected to possess more complex skills and be able to think critically and use information in a variety of ways. States have responded by writing new standards that raise expected performance levels. The Missouri Department of Elementary and Secondary Education, as a result of the Outstanding Schools Act, has developed the Show-Me Standards which include curriculum frameworks and assessments to "raise the bar" of expectations and to insure students achieve these high levels of performance.

In order to express commitment to high levels of achievement for all learners, local school districts should adopt a goal of appropriate learning services for gifted students, as well. This should be expressed in the form of a mission or philosophy statement delineating the district's view of gifted education and related services. The local board of education should approve this philosophy statement and record a commitment to establishing and continuing defensible identification and service to the district's gifted students. To that end, this section should serve as a guide for school districts in planning and implementing a comprehensive program for gifted students.

Since gifted students have often mastered as much as 50% of the material to be learned in a given school year before the year begins, much of their time in class may be wasted (Rogers, 1991). Gifted children need consistent opportunities to learn new material and to develop the behaviors that allow them to cope with the challenge and struggle of new learning (Devlin and Winebrenner, 1992). This can only be accomplished when students are consistently offered a range of learning opportunities commensurate with their abilities.

Often our brightest students are not functioning as well-adjusted, eager, creative individuals. Possible reasons are that the learning level may be too simple, teaching methods may be opposed to the child's learning style, content may appear to have no reason or purpose, or learning may be occurring with no opportunity to apply the knowledge. The child could be bored with the class or with school or he or she may have a personality conflict with the teacher. These and many factors other than academic or intellectual ability can affect a child's classroom performance. Gifted children are no exception to this rule.

Gifted children are subject to unique stressors and are vulnerable to difficulties with social/emotional adjustment (Grenshaft, Greenbaum, & Borovsky, 1995). Gifted students possess characteristics such as intensity, sensitivity, over-excitabilities, high energy levels, low tolerance for frustration, pressure to meet internal and external expectations, and perfectionism, that make them vulnerable to social/emotional problems and bring them into conflict with their environment, especially when family or school conditions are not optimal (Moon, Kelly, & Feldheusen, 1997). These traits must be taken into account when planning and implementing comprehensive gifted education services.

A school district's comprehensive plan for services should include:

- * a statement of philosophy describing the system's commitment to providing appropriate services to gifted students;
- * a defensible approach to identification, including consideration of the difficulties of identifying special populations of gifted students;
- * a description of program options available and those to be implemented;
- * staff training opportunities in the nature and needs of gifted children, curriculum differentiation, and the affective needs of the gifted;
- * methods to incorporate community resources to supplement school services;
- * plans to involve parents in the planning and implementation of current and future services; and
- * plans for system evaluation of program goals and objectives (Renewing Maryland's Commitment).

Dr. Nell Sanders supports the need for special programs for gifted students in her article "Education for the Gifted: Six Challenges for the 80's." The following are reasons she states justifying this position:

1. Special programs for the gifted are in harmony with the basic principles of American education and our democratic society, which recognize the importance of the individual and opportunities for the individual to develop fully his or her capabilities.
2. Gifted students have learning and developmental needs which are unrecognized and unmet in many regular classrooms. These needs require qualified teachers, differentiated learning opportunities, and appropriate program options.

3. Justification for special programs for gifted students fits logically with special education programming for other students with unmet needs by focusing on an individual student's needs which differ from the norm.
4. How our most able students are treated will have a tremendous impact on the future of our state and of our nation.

"Without a comprehensive plan of services, these students are at risk of not meeting their potential (Renewing Maryland's Commitment)." The special academic, social, and emotional needs of this population of children are compelling reasons to provide appropriate educational services, for at least a part of the school day or week, with other students of similar abilities.

When gifted students are appropriately challenged, everyone wins. The children learn to love school and to love learning. They will achieve as much as they are allowed to achieve and can spread this enthusiasm to their classmates. They will be engaged in their educational activities and will not get into as much trouble in the classroom, making the teacher's job easier. And society will gain a productive member capable of extraordinary things.



CREATING A MENU OF SERVICES

Gifted students achieve more in special programs than their gifted peers who do not participate in special programs (Delcourt, Loyd, Cornell, & Goldberg, 1994). A comprehensive "program" for the gifted is made up of components that flow from the identified needs of the gifted students, are causally related, and must be considered as interdependent parts of a carefully designed system. "It is a great mistake to adopt a pull-out program because that is what the adjacent district does, or to opt for provisions within the regular classroom because it is politically expedient to do so, or to establish a resource room format because that approach was given a hard sell at a conference (Borland, 1989)."

Program planners must determine what the students' *needs* are, which needs are currently being met through other district programs, and what resources are available to meet the unmet needs. They can then make the most logical decision to bring a package of comprehensive services to the gifted students in the district. The greater variety of options the district is willing to consider for student placement, the greater the flexibility available when making those placement decisions, and the more opportunity the district will be able to offer its most capable students.

No single programming option will meet the needs of all gifted children just as no one reading program will teach all students to read. The "one size fits all" approach doesn't work in the field of education. Students' needs must be evaluated individually and a program of service designed to "fit" those needs. Therefore, a school district must consider a variety of service options when making placement decisions for a gifted child.

Once a child has been identified as having superior abilities such that his or her educational needs cannot be met through the regular grade level curriculum, all service options should be considered and the most appropriate placement decisions made for that child. Each placement decision should be made in the best interest of the child. Some students will require only one option to meet their needs while other students may require a combination of two or more services.

The implementation of some services are less administratively burdensome than others. Some placement decisions will require little or no modification of the student's current placement. Some placements will require many changes. Flexibility is the key! Changing a student's daily schedule, course of instruction in one or more subject areas, or possibly a grade level may cause difficulty for some teachers, parents, even students. Open communication with all faculty and staff, parents of gifted children, and the gifted children themselves, in regard to the policies of the gifted program is essential to ensure smooth transitions when changes in placement are warranted.

Gifted children may be intellectually years ahead of their chronological age or emotional maturity. Because of this asynchronous, or uneven, development of abilities, gifted students have educational, social, and emotional needs that are different from their age peers (Tannenbaum, 1992). Meeting these needs requires modification of curriculum, teaching methods, and pacing. All students are expected to learn certain things by the time they graduate from high school. The Show-Me Standards, which include four broad goals, four performance (or process) areas, and six knowledge (or content) areas address these “basics” for the state of Missouri.

Gifted students should be held accountable for acquiring the same skills. However, they can and need to focus on processes and thinking skills more and facts and memorization less. They can and need to be expected to demonstrate their learning by creating products which are judged by a real-world audience of adults from an appropriate field of study. For example, all students need to learn their math facts. A student who is gifted in mathematics needs also to be given the opportunity to think and work like a mathematician and to have access to a mathematician for job shadowing or for a mentor relationship.

The following are service options which deserve consideration for a school district's program of services for gifted students. Not all options will be beneficial or appropriate for all gifted children. These are possible placement and educational intervention options which should be used singly or in combination, depending on the specific needs of the child. Appropriate educational placement decisions should be made by a person or persons knowledgeable of gifted education in general and the gifted child specifically.

ADMINISTRATIVE STRATEGIES

Pull-out programs/Resource rooms

Resource rooms are used when students are “pulled out” of the regular classroom for some time daily or weekly for the purpose of interacting with other gifted students and working on differentiated curriculum. The classes are usually smaller than the regular classroom and are staffed by a certified teacher of the gifted. The curriculum offered in these classes is differentiated from the regular classroom curriculum in a way that fits the unique needs of the students. The location of the resource room could be in the child's home school, several schools could transport their identified students to another school building, or the district could have one center in which all gifted students are served.

The goals and objectives of programs using resource rooms vary greatly due to the wide range of interests and abilities of the students. Programs may focus on modifying general academic content, specific content area, or process and thinking skills. Creativity or artistic abilities may also be the focus.

The benefits of resource room programs are “moderate to large” positive effects on gifted students’ achievement (Kulik & Kulik, 1992) and greater growth in creative and critical thinking (Rogers). Delcourt et al. (1994) found that identified gifted students participating in resource room programs felt more capable in their academics, preferred more challenges, and were more independent than their gifted peers served in separate programs.

This option is a “best fit” for the gifted child identified with the goals and objectives of the program in mind. If the program focuses on language, then children gifted in the area of language and writing should be identified and placed. Children with consistently high academic achievement should be identified and placed in a program focusing on interdisciplinary academic subjects.

Special classes

Special classes are used to provide services to gifted students on a daily basis. Students may be placed in the classroom for one or more periods per day or, in the case of block scheduling, every other day. A certified teacher of the gifted staffs the class, allowing the students to pursue curriculum that is differentiated from the regular grade level at their own ability level and pace. Special classes are similar to a resource room program except that the students are not missing, or “pulled-out” of another class or program to participate.

The goals and objectives of this type of programming are as varied as the students in the class. This allows for individualized instruction, cooperative and small group work, sessions specifically designed to address students’ affective needs, and whole-group class discussions. The class can be designed to focus on a particular subject area. The class can replace a content area class, such as an English class, or an elective. The district decides if the class will be offered for credit and if students will receive a grade for the work completed. The special class is most often the programming choice of middle-, junior-, and high schools with departmentalized or block schedules.

Rogers found that separate classrooms for the gifted resulted in no discernible difference in achievement in the typical student but resulted in substantial differences in achievement in gifted students. In fact, the absence of the gifted students from the regular classroom allowed for new dynamics to appear and new classroom leaders to emerge. Delcourt et al. found that gifted students served in separate classrooms showed higher levels of achievement than gifted students served in other programming options.

This option is beneficial for the gifted student with a special academic or artistic ability because the class content can be narrowly focused. Students can sign up to take this class without being pulled out of another class. This option is also beneficial in the middle school when peer acceptance is of utmost importance. Students can take the

class without drawing attention to their unique placement. This can be extremely helpful in preventing students from dropping out of the gifted program in middle school for fear of being different from their peers.

Cluster grouping

Cluster grouping is the practice of placing four to six identified gifted students in the same regular classroom with a teacher having had special training on how to teach gifted students. Cluster grouping is receiving more attention as a programming option for gifted youth (Feldhusen, Hoover, & Sayler, 1993). The other students in the class are of mixed ability. This method is different from ability grouping in that the other students are heterogeneously grouped. The “cluster” of gifted students allows them to learn together while avoiding permanent grouping arrangements for their classmates.

Teachers in classrooms without the cluster report that new leaders have developed in their classes. Teachers in all classes, with and without the cluster of gifted students, report the academic achievement of the entire class has improved (Devlin and Winebrenner).

Effective implementation of cluster grouping requires adequate training of the regular classroom teachers in the nature and needs of the gifted child and how to differentiate curriculum to meet the student’s needs. Westberg and Archambault (1997) found that while “typical teachers tailor instruction to students’ similarities, truly effective teachers tailor instruction to students’ differences as well...”

Westberg and Archambault conclude that “implementation of successful [regular] classroom practices” must include (a) teachers’ advanced knowledge and training, (b) teachers’ willingness and readiness to embrace change, (c) teacher collaboration, (d) teachers’ beliefs and strategies in curriculum differentiation, (e) leadership (building and district level), and (f) autonomy and support.

Gifted students feel more accepted when they are around students of like abilities. The cluster allows this to occur on a daily basis. Teachers no longer have to deal with the strain of trying to meet the needs of just one precocious child in the classroom. It is more realistic to expect that differentiation will occur when the teacher knows the effort will impact several students and he or she has adequate training (Gifted Students, 1992).

Cluster grouping should not be the only service provided to students identified as gifted. This should be provided in conjunction with other services which allow the gifted students time to interact with their intellectual peers. School districts will find that with cluster grouping they are able to incorporate an additional, cost-effective programming option as part of their comprehensive package of gifted education services (Devlin and Winebrenner).

Full-time gifted services

Full-time service for gifted students is another option in providing comprehensive gifted education programming. Identified gifted students are grouped together all day with the possible exception of specialty classes, such as art and physical education, lunch, and recess.

Class sizes are generally smaller than in the regular classroom and services can be targeted to meet the needs of the gifted in every area. All curriculum can be differentiated to be appropriate for the students' level of abilities. Acceleration and curriculum compacting (see Curriculum compacting below) can be used in each content area. The instructional processes used and products created can be differentiated from what may be experienced in the regular classroom.

This option is most often reserved for the highly gifted child, generally incorporating a range extending from IQ 150 to IQ 180 and over, although all gifted students will benefit from prolonged exposure to other students of similar interests and abilities. For optimal learning for the highly gifted, Silverman (1989) recommends "full-day programs, conducted by specially trained teachers using a specially tailored curriculum."

An individualized program is essential in educating the highly gifted. The need for repetition dramatically decreases and the pace of instruction increases accordingly. These children are as different from other gifted children as the gifted are from their age peers. The number of children in this group is small, and they require modifications even more highly individualized than those required for the moderately gifted.

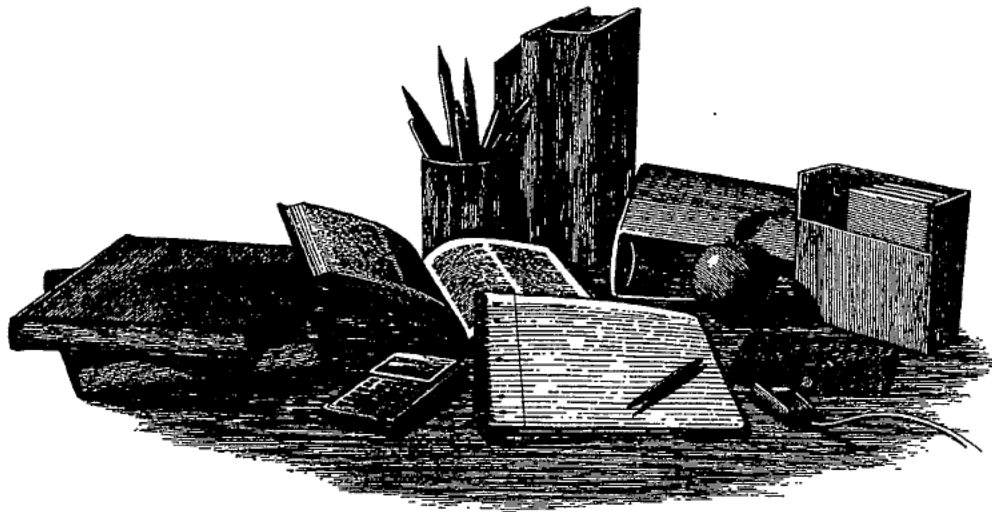
Mentoring

One of the most valuable experiences a gifted student can have is exposure to a mentor who is willing to share personal values, a particular interest, and their time, talents, and skills (Berger, 1990). Mentoring does not imply an internship or apprenticeship and it is not merely for the acquisition of knowledge or skills, although the student does learn these things from a mentor. A mentorship is a dynamic shared relationship in which values, attitudes, passions, and traditions are passed from one person to another (Boston, 1976).

The following guidelines may be helpful to educators wishing to establish a mentoring program:

- * Identify what (not whom) a youngster needs. The student may want to learn a particular skill or subject or to be exposed to a new field of study.

- * Decide with the youngster whether he or she really wants a mentor. Some might want just an advisor, or exposure to a career field, rather than a mentor relationship which entails prolonged contact and growth.
- * Identify and interview a few mentor candidates. Determine if they have the time to be a real role model, if their style of teaching would be compatible with the student's learning style, and whether they are excited about their work and want to share that excitement with a child.
- * Prepare the student for the mentorship. Make sure he or she understands the purpose of the relationship and the rights and responsibilities that go along with it.
- * Monitor the mentor relationship. The youngster should be building a lasting, personal relationship with the mentor, self-esteem and self-confidence should be fostered, common goals developed, and each side should have realistic expectations.



INSTRUCTIONAL STRATEGIES

Acceleration

Acceleration is the practice of allowing a student to move through learning material in a content area class or a grade level prior to the prescribed timeframe, based on early mastery. This can be achieved by pre- and post-testing and allowing students who demonstrate mastery at an accepted level to progress at their own pace to other material. Students can be accelerated in one or more content areas or be grade accelerated, more commonly known as “grade skipping.” This strategy has been found to be successful in preventing or reversing underachievement in gifted students (Lovance and Rimm, 1992).

Acceleration can take many forms in gifted programs. In elementary school programs, the type of acceleration depends on the goals and objectives of the program. For instance, if the curriculum in the gifted program is differentiated in content, the 5th grade gifted child may be learning 8th grade material. If the curriculum mirrors that of the regular classroom, the students will demonstrate mastery of the prescribed material and then will study the topic in more depth and breadth than will be covered in the regular classroom.

In elementary school, district policies may allow for early entrance to or exit from a grade level. In secondary schools, acceleration can take the form of honors or Advanced Placement courses, subject acceleration (i.e. a 9th grade student enrolling in 11th grade courses), dual enrollment with a postsecondary institution, the International Baccalaureate program, and/or early graduation.

Some critics have argued that acceleration hinders students’ social and emotional development because they are placed in classes with other students much older. While each student will progress through levels of social and emotional development at different speeds, research has shown that acceleration results in higher levels of social development and participant satisfaction, as well as academic achievement (Clark, 1979; Swiatek, 1993; and Slavin, 1990).

Curriculum compacting

Curriculum compacting is a teaching method used to complete a prescribed amount of content in a shorter period of time than usual. This entails pre- and post-testing students to determine current knowledge; enriching students coursework through independent study, alternative assignments, and higher level material; and/or pairing them with a tutor or mentor (Curriculum Compacting, 1994).

While gifted children still need to be with others of like abilities for some part of each day or week, this option allows school districts to provide additional services to their

identified gifted students on a daily basis as well as encouraging teachers to modify the curriculum for all students, including other students with special needs. With adequate training and support, regular classroom teachers can prepare alternative assignments appropriate for the ability level of all of their students, as well as using varied grouping strategies and more engaging teaching practices (Reis et al., 1991).

All children benefit greatly from curriculum paced according to their individual needs. The gifted child is no different. The low to moderately gifted child, who spends a majority of his or her instructional time in the regular classroom should be targeted for this service option. In addition to other service options which provide gifted students opportunities to interact with their intellectual peers, such as a pull-out program or a special class, curriculum compacting should be part of a comprehensive plan of service to gifted students.

Flexible ability grouping

Flexible ability grouping is the grouping of students for instruction according to their ability level. This is different from tracking in that students are not in the same group for every subject and they can move in and out of groups as their skills increase. This is different from cooperative learning in that the grouping is for instructional purposes and the goal is not solely to improve social skills (see Cooperative learning below). The students are placed in a group of children with like abilities, the content is modified to be appropriate for the abilities of the group, and the students may or may not complete their assignments individually.

Flexible ability grouping also allows school districts to provide additional services on a daily basis in the regular classroom. Similar to curriculum compacting, this option is a good partner to other service options which allow gifted students interaction with other gifted children. The content taught to the group with the highest abilities in a given content area may be compacted, as well.

A report from the National Research Center on the Gifted and Talented shows that gifted students make "substantial" academic gains when grouped with other gifted students (Rogers). Karen Rogers found that gifted students benefit from regrouping for subject instruction and within-class ability grouping and that this technique does not lower the achievement of the other students in the classroom. Rogers makes the following recommendations with regard to gifted education programming:

- * gifted students should spend most of their day together to work with their intellectual peers on appropriately differentiated curriculum,
- * schools should group gifted students together for specific subject instruction (acceleration) and use multi-age grouping (more than one chronological grade level) according to children's ability, and,

- * heterogeneously mixed cooperative learning should be used sparingly, if only to improve social skills.

Independent study

Independent study allows students to pursue a topic of interest at their own level and pace. This may be done within the context of some of the other service options or separately. A student may independently study a topic in a resource room, in a special class, or in the regular classroom. This option provides a maximum amount of flexibility because the student and the teacher establish the parameters of the assignment, the topic, process, product, and completion date in advance. Then the student is on his or her way, independent of the rest of the class.

This option works well with students who are self-motivated and seek guidance from the teacher when problems arise, with students interested in research, and with students working on individual projects. It requires little additional training for the regular classroom teacher outside of knowing how to motivate the students, establish expectations for the final product, and trouble-shoot when students need assistance.

Cooperative learning

Cooperative learning is a set of instructional strategies which employ small teams of pupils to promote peer interaction and cooperation for studying academic subjects (Sharan, 1980). These "teams" can be determined based on age or ability or they may be heterogeneously mixed. Cooperative learning is based on the beliefs that all students are capable of understanding, learning, and performing leadership tasks; the most effective student groups are heterogeneous; students need to learn to recognize and value their dependence upon each other; the ability to work effectively in a group is determined by the acquisition of specific social skills; and student groups are more likely to attempt resolution of their problems if they are not "rescued" by their teacher (Dishon and O'Leary, 1984).

All students need to learn to interact and work with other students of varying abilities and interests. Cooperative learning groups should emphasize not only content, but also social/group dynamics skills, group goals with individual accountability for mastery of material, and face-to-face interaction and involvement with other students (Coleman, 1994).

Cooperative learning is a controversial method to use with gifted children because of a lack of evidence showing any positive effects on gifted students' achievement. In addition, the material used is limited to grade level in content and pace and not differentiated for gifted students' level of ability. There are also concerns that gifted students are used as junior teachers instead of being challenged to excel, and that cooperative learning will be mistaken with and/or used instead of curriculum compacting and other service options for the gifted (Rogers, 1991; Nelson, Gallagher, & Coleman 1993; Feldhusen, 1990; Robinson, 1990).

Heterogeneous cooperative groups will not always work with high achieving students. There are times when the gifted should be grouped together for fast-paced, accelerated work (Johnson and Johnson, 1989). According to Grace McDonald, lead supervisor of gifted programs for Broward County, Florida, no one benefits when there is more than a two grade level difference in ability among students in a cooperative group.

Matthews (1992) found when interviewing gifted students about cooperative learning that "when they work with classmates who don't care about the work, or when they repeat already mastered work, they become frustrated and bored." Cooperative grouping has been shown to generally improve students' acceptance of culturally diverse students, and, although no research has been reported linking any gains specifically related to the gifted, cooperative learning, when used for this purpose only, may be justifiable with the gifted (Rogers). Cooperative learning can be used effectively with gifted students if the following decisions are made thoughtfully:

1. Is the activity really appropriate for cooperative groups?
2. Which activities are more appropriate for totally heterogeneous groups?
3. Which activities require gifted students to work in their own cooperative groups with appropriately challenging tasks (Fascilla, Hanninen, and Spritzer, 1991)?

Academic competition

Recently, there has been an increase in the popularity of academic competitions which focus on inventiveness, creativity, ingenuity, and problem solving. Gifted students enjoy the challenge of these competitions and may work harder and be more resourceful than they have in past projects. The chance for students to work on a common goal with other students of like interests and abilities, and to be recognized for their efforts, is appealing to the students, and to their teachers and parents.

While it is true that gifted students enjoy a little friendly competition, it is important to understand that the potential dangers lurking in this option (overcompetitiveness, loss of perspective, and the adult pressure inherent in organized competitions) are twofold (Borland). First, many schools will limit participation in these competitions to only identified gifted students. The cleverness required to do well in academic competitions is not the sole possession of gifted students.

Secondly, it is possible that the school district will view the "team" as the gifted program or expect the teacher of the gifted to devote class time to practicing for the competition. "The activities involved in these competitions may be fun... but this sort of activity cannot in any way be equated with the high-level intellectual activity that is required in a defensible differentiated curriculum for the gifted (Borland)." Although academic competitions should not be a major part of the curriculum, they do offer yet another option to complete a comprehensive array of programming choices.

EARLY CHILDHOOD EDUCATION

"Age plays an important role in current understanding of intelligence. Even in children as young as two years of age, different patterns of ability can be described." (Roedell, Jackson, and Robinson, 1980). Children can be reading at a second grade level by the age of two, some perform well on spatial tasks, and some possess outstanding memory abilities. Precocious young children tend not to be equally advanced in every area, leading us to attend to independent factors that affect ability at an early age.

The current research in the field of brain development--how the brain collects and interprets incoming messages, codes and organizes the stimuli, and forms patterns of knowledge--is provocative and troubling. It's provocative in that the more we know about brain development, the more we can enrich children's lives with activities and information that will encourage growth and development. It's troubling because we know that some children, because of depressed economic conditions, unfortunate family situations, or inadequate child care, do not receive stimulation and challenge during the first three years of life; according to the new research, these are the crucial years when the paths for future learning and motivation are being created.

A baby's brain cells begin growing in the womb at about three weeks; this development will create the "hard-wiring" of the brain (Healy, 1987). At birth the brain contains all of its billions of neurons. As neurons react to incoming stimuli (sights, sounds, tastes) they fire off connections to neighboring cells, creating pathways and connections, which will eventually be thoughts. Unused and unnecessary cells and pathways are "pruned" automatically. "Scientists are excited about finding that the growth of these networks - and thus the ultimate quality of an individual's thought - is plastic, or responsive to environmental influences (Healy)."

Jane Healy, in a presentation to early childhood educators in Missouri, stated the belief that "If you don't use it, you lose it." She explained that if a person walks through a forest once, a slight path is created which, if not traveled again, will grow over. If the same path is traveled over and over again, a defined pathway is created which will be used again and again as it is the most efficient way for the person to get through the woods. Brain development is similar. The brain interprets early experiences in the child's environment and creates a path. If not reinforced, this path may disappear. If reinforced with other learning experiences, the path becomes more definite and efficient. Babies are born with a "need to know" the job of parents and educators is to give them the raw material of appropriate stimulation at each developmental level.

According to Jane Healy, some important findings generated by the current research in brain development, all of which have implications for gifted children, are:

1. Cells that fire together wire together. More stimuli mean more connections and pathways; less stimulation means fewer connections and possible loss of potential.

2. Neuroplasticity is life-long. You can teach old dogs new tricks; it just takes longer. In other words, get 'em while they're young.
3. The brain has critical or sensitive periods for certain types of learning. Developmental stages are important and developmentally appropriate stimulation is needed.
4. If a skill cannot be accomplished with the most appropriate neural networks, other systems may be developed, even if relatively inefficient. The brain is smart and will create a path to get things done; a child who thinks "out of the box" may do this more often.
5. Developmental stages mirror brain maturation. When the brain is ready, so is the child.
6. The brain builds itself according to the stimuli. Higher level concepts and problem solving require active, constructivist learning. Children are not born solving problems, even potentially gifted children; they need experience to shape their innate abilities.
7. Multi-sensory input aids memory and learning. All children need to hear, see, feel, and do to learn.
8. While mild stress (challenge) may improve mental processing, excess threat appears to block higher order thinking. Affective needs are important to consider; appropriate challenge is the goal.

The implications for gifted education at this time in a child's life are clear. Tap the potential with adequate learning experiences to stimulate the development of pathways to prepare the child for future learning. By the time children enter kindergarten at age five, much of the way they will think has been created. Good pre-school programs; adequate, enriching child care; and effective Parents as Teachers training can help children develop the foundation for achieving their potential.

STATE-ASSISTED OPTIONS

The state of Missouri defines gifted children (RSMo 162.675, 1973) as "those children who exhibit precocious development of mental capacity and learning potential as determined by competent professional evaluation to the extent that continued educational growth and stimulation could best be served by an academic environment beyond that offered through a standard grade level curriculum." The legislation containing this definition also provided funding to assist school districts in hiring specially trained staff and purchasing special instructional materials necessary to serve gifted children. The state special education legislation commonly referred to as House Bill 474, enacted in 1973, authorized the State Board of Education to establish standards and implement programs for gifted children.

The statute authorized the Department of Elementary and Secondary Education to reimburse programs for gifted children operated by local school districts in conformity with the standards with financial aid up to one-half the costs of special teachers and

special materials for the programs. In the 84th General Assembly, Missouri legislators passed Senate Bill 797, which increased the state reimbursement from a maximum of 50% to a maximum of 75% funding for state-assisted programs.

Of those students who are identified as gifted, school districts may place up to five percent of their population in targeted grades in a state-assisted academic gifted program and may identify and serve up to an additional two percent in a state-assisted fine arts gifted program. It is important to note that state-assisted programs for gifted students are not designed for the typical scholar who is frequently an excellent student and can earn "A" grades and achievement honors. State-assisted gifted programs are designed for the small percentage of students with truly outstanding potential as compared to other students of the same age, background, and experiences and are meant to provide differentiated instruction to enable them to develop fully their abilities.

Since the program began in 1974, it has expanded steadily in terms of the number of children served, the grade levels included, and the quality of programs offered. During its first year, only seven school districts participated in the program. They served 1,465 children at a cost to the state of \$249,311. When matched with local funds, the total expenditures were approximately \$500,000. During the 1997-98 school year, 819 teachers certified in gifted education in 299 participating school districts will serve over 28,700 students. State aid for such programs amounts to \$20 million, with the total expenditure expected to exceed \$31,000,000.

The State Board of Education is committed to increasing the opportunities for gifted children to participate in special programs appropriate for their needs. In its publication Missourians Prepared-Success for Every Student, the State Board of Education recommends that the Missouri School Improvement Program be used to assess and monitor all special programs in each school district, including gifted programs. The State Board also recommends that schools become much more flexible in meeting the educational needs of each student.

To be in compliance with Missouri School Improvement Standard 8.2 relating to gifted education services, a school district must be able to document that it has established defensible procedures to identify gifted students in the district and a systematic plan of services to ensure their needs are being met. The district must know who the gifted students are if it is going to provide these students with the appropriate level of services to meet their needs. The methods of identification and the types of services provided may be different for varying grade levels.

The district must also be able to document that it is making a systematic effort to ensure that gifted students' needs are being met throughout their years of schooling in the district. A state-assisted program for certain grades should be only a part of the overall services that a district is providing for gifted students. Having group counseling sessions with the identified gifted students to meet their social and emotional needs should also be part of any systematic effort to meet standard 8.2. If a state-assisted

pull-out program for certain grades is the only service the district is providing for gifted students, the district is probably not in compliance with standard 8.2.

A sustained effects evaluation should be conducted to demonstrate that the outstanding potential which caused students to be placed into the gifted program has been maintained or enhanced. Test scores may or may not be the most appropriate way of determining this. Since these students probably entered the program with some high test scores (perhaps near the test ceilings), it may not be feasible to expect them to raise the scores.

Instead, schools can take a close look at the objectives/goals of their program and determine how they can measure whether or not these objectives have been met. The teacher, parent, and student surveys that are commonly used now might continue to be useful if one of the goals pertains to the students' affective development, for example. If a goal is to develop higher-order thinking skills, the school must determine how it can demonstrate that this skill has been enhanced. If a goal is to further advance a particular student's mathematics skill, what evidence is there to show that his/her work is more sophisticated than it was at the beginning of the year and that it is still far ahead of what his/her peers in the regular classroom are doing?

The funds available through the state-assisted gifted education program are meant to offset any additional costs incurred by a school district in the implementation of some gifted education services. These funds are not meant to cover all the costs of every option that should be made available to meet the special needs of the gifted. The costs generally approvable for state-assistance are the salary and benefits of additional certified teachers and special instructional materials used in the classes taught by these additional staff members.

ACCEPTABLE AND EXEMPLARY SERVICES

If a public school district in the state of Missouri is interested in meeting the needs of its most able learners, there are four areas in which decisions must be made: student assessment and placement, program design, curriculum and instruction, and professional development. A committee should be convened to discuss the district's current placement options and needs. The district should engage in a planning phase prior to the implementation of any new service options. Policies and procedures should be written and adopted by the board of education in advance of screening and identification, placement of students, and parent notification.

The following charts, modeled after the Texas State Plan for the Education of Gifted Students, detail which policies, procedures, service options, or district efforts are the minimum acceptable and which are considered part of an exemplary program. An exemplary program of gifted services includes all parts of an acceptable program in addition to the other services recommended.

Part I: Student Assessment and Placement

A defensible assessment system, including use of multiple criteria, is in place in the district. The system allows for diverse abilities of students to be measured using research-supported, reliable, and valid measures of abilities. Provisions are made for adequately assessing the abilities of students from underrepresented populations of gifted students, including students from culturally diverse, limited English proficient, and/or low socioeconomic backgrounds, rural areas, and students with physical challenges.

ACCEPTABLE	EXEMPLARY
1. -Written policies on screening, assessment, and placement are approved by the board of education and disseminated to all parents.	1. -Board policies on student assessment are reviewed annually and modified as needed.
2. -Permission is obtained before initiating any testing which will be used to make placement decisions.	2. -A parent information session is offered prior to the nomination period which includes discussion of program goals and objectives and district policies and procedures.
3. -The district has a defensible identification plan that takes into account the diversity of its student body. -Tests are administered by competent professional evaluators with specific training in the administration of assessment instruments.	3. -The district identification plan includes specific provisions for identifying special/underrepresented populations. -Tests are administered by a school psychometric examiner or a school psychologist. -A policy for reassessment of identified students is based solely on performance in the program and, if reassessment occurs, it is no more than once in elementary grades, once in middle grades, and once in high school.
4. -Parents and staff are informed of student placement and parents are given opportunities to schedule conferences and discuss assessment data.	4. -All staff are given an opportunity to discuss student assessment data.
5. -All students not placed are screened at least once per year, evaluated, and provided appropriate services.	5. -Students who are evaluated and not identified as gifted, but whose test scores and relevant data indicate additional learning needs, are appropriately placed in service options other than a state-assisted option.
6. -A written policy on placement of transfer students is approved by the board of education. -When a gifted child withdraws and transfers to another district the sending district will include the child's assessment data.	6. -When a gifted child transfers to another district the sending school will include a narrative evaluation of the child's participation in the gifted program and samples of the child's work.
7. -Written policies include provisions for continued participation.	7. -Policies relating to students exiting from the program are based on a multiple criteria approach, including performance in the program, consultation with parents and the student, and is ultimately, a committee decision.

Part II: Program Design

The district provides a menu of possible placement options. A student's individual evaluation information is used to identify learning needs which are not met in the regular classroom and services are tailored to meet those needs. Program options may be used singly or in combination to meet the academic, social, and emotional needs of the child.

ACCEPTABLE	EXEMPLARY
1. -District offers a menu of learning opportunities that are commensurate with students' abilities and are offered during the school day.	1. -Services for the gifted are selected from a menu of structured, sequenced and appropriately challenging options.
2. -Information on all program options is disseminated to parents.	2. -Services are provided for gifted students in the areas of specific academic abilities, visual and performing arts, and creativity. -Additional options are available outside the regular school day and throughout the entire year. -A handbook or manual is available for parents, administrators, and teachers containing information on all policies, procedures, and services.
3. -Program options enable gifted students to work with other students of similar abilities, as well as in independent learning activities.	3. -District administrators, regular classroom teachers, and counselors actively support all program options.
4. -A trained staff position is assigned to the program. -Local funding is used to provide appropriate services that are not state-funded.	4. -A coordinator who has training in gifted education is responsible for effective implementation of program options. -Inservice is provided on the nature and needs of gifted students to all district staff.
5. -Annual evaluations are conducted to review, revise, and improve services.	5. -An outside professional in the field of gifted education is employed to review the district's evaluation design and make recommendations.

Part III: Curriculum and Instruction

The district offers curriculum appropriate to meet the special learning needs of the identified students and that curriculum is delivered in a manner appropriate for their ability and learning style. The curriculum is differentiated from that offered in the regular classroom in content, process, and product.

ACCEPTABLE	EXEMPLARY
1. -A menu of appropriately challenging activities is offered. -Appropriate in-class options are considered when the district's regular classroom curriculum is modified or updated.	1. -Options offered includes challenging activities in intellectual areas, creative and/or fine arts areas; leadership; and specific academic areas.
2. -Students have the option to pursue areas of interest in independent research. -Scheduling modifications are implemented to accommodate service options. -Career and/or college counseling are provided at an appropriate level.	2. -Subject and/or grade acceleration, flexible ability grouping, and flexible pacing are provided, where appropriate. -Local policies are in place that allow students to participate in dual enrollment, correspondence courses, early graduation, or mentoring.
3. -Learning experiences lead to advanced level products or performances. -Student performance is periodically assessed in a manner consistent with current research in the field of gifted education and the information is disseminated to parents.	3. -Participating students at all grade levels are producing sophisticated products/performances that are presented and evaluated by a real world audience outside the school building.
4. -Curriculum offered in the gifted program is modified based upon annual evaluations.	4. -Resources and release time are provided to teacher(s) of the gifted for gifted education programming and curriculum development. -Policies relating to the selection of adequately challenging instructional materials appropriate for differentiated learning are in place. -Curriculum offered in the regular classroom is modified based upon annual evaluations.
5. -District school improvement plans include consideration of improvements or modifications of services to gifted students.	5. -Gifted education services are an integral part of the overall curriculum services provided to students in the district.

Part IV: Professional Development

All personnel involved in the planning, development, and delivery of services have knowledge and training to enable them to offer appropriate service and curriculum options for gifted students. All staff in the district have knowledge of the nature and needs of gifted students and of the goals, objectives, and policies of the programming options.

ACCEPTABLE	EXEMPLARY
1. -Teachers involved in the delivery of services to gifted students have at least a provisional certification in gifted education.	1. -All teachers involved in the delivery of services to gifted students have full certification in gifted education. -The district has a written plan for professional development for all staff in the area of gifted education.
2. -All district staff receive an orientation to the policies, procedures, and services related to the gifted program. -Staff in the program for gifted students are involved in the planning of services and in conducting the training of school personnel.	3. -Non-certified staff who provide services to gifted students are offered opportunities to increase their understanding of gifted children. -Administrators, counselors, and school board members who have authority over the program receive annual professional development to increase their understanding of gifted children.
3. -Teachers involved in the delivery of services to gifted students have at least annual opportunities to attend a workshop or seminar for professional development.	2. -All teachers are encouraged to pursue advanced degrees or obtain additional professional development in the area of gifted education. -District supports participation in professional development by providing tuition assistance or release time. -Teachers of the gifted and administrators visit model programs in the state.
4. -Evaluation of access to professional development opportunities is ongoing and modifications are made according to needs.	4. -All staff are provided at least one professional development opportunity in the area of gifted education annually.

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STATE-ASSISTED PROGRAMS FOR GIFTED CHILDREN GROWTH CHART

	Number of Districts with Programs	State Aid	Number of Students Served in Programs	Number of Teachers	State Aid per Stu- dent
1974-75	7	*\$249,311	1,465		\$170
1975-76	10	\$323,651	2,343		\$138
1976-77	13	\$1,325,264	3,943		\$336
1977-78	27	\$1,539,362	6,196		\$248
1978-79	39	\$1,560,362	7,665		\$183
1979-80	58	\$1,900,336	8,546		\$222
1980-81	68	\$2,017,492	8,757		\$230
1981-82	79	\$2,591,692	10,078	244	\$257
1982-83	89	\$2,886,159	10,666	250	\$271
1983-84	109	\$3,493,822	11,686	253	\$299
1984-85	132	\$4,184,007	12,375	306	\$338
1985-86	162	\$5,022,991	13,333	333	\$377
1986-87	189	\$5,886,109	13,645	353	\$431
1987-88	214	\$6,529,558	16,361	551	\$399
1988-89	227	**\$10,663,156	17,472	590	\$610
1989-90	259	\$13,398,433	17,921	641	\$747
1990-91	266	\$15,400,199	18,050	653	\$853
1991-92	270	\$15,474,704	22,511	674	\$687
1992-93	264	***\$16,249,489	24,082	700	\$675
1993-94	269	\$16,249,489	24,877	817	\$653
1994-95	289	\$16,249,489	25,644	863	\$567
1995-96	292	\$16,249,489	27,000	810	\$602
1996-97	291	****\$20,000,000	28,525	790	\$701
1997-98	299	\$20,000,000	28,781	819	\$695

*HB 474 established funding for gifted at 50% reimbursement.

**SB 797 increase state aid from 50 to 75% effective July 1, 1988.

***Cap placed on gifted state aid - \$16,249,489

****Cap increased

GIFTED EDUCATION ORGANIZATIONS

The Council for Exceptional Children
Talented and Gifted Division
1920 Association Drive
Reston, VA 22091
(703)264-9446

The Gifted Association of Missouri (GAM)
P.O. Box 1495
Jefferson City, MO 65102
Nancy Pate, President
(816)891-6488

The Gifted Children's Information Office
13157 North Olive Spur Road
St. Louis, MO 63141
(314)878-5029

The National Association for Gifted Children
1707 L Street, NW, Suite 550
Washington, DC 20036
(202)785-4268

The National Research Center on the Gifted and Talented
The University of Connecticut
362 Fairfield Road, U-7
Storrs, CT 06269
(203)486-4826

WEB SITES AND E-MAIL ADDRESSES

American Association for Gifted Children
<http://www.jayi.com/aagc/>

Colorado Gifted and Talented Education
<http://www.cde.state.co.us/gtttable.htm>

Council for Exceptional Children
<http://www.cec.sped.org/>

Gifted Education Press
<http://www.cais.com/gep>

Educational Resources Information Center (ERIC) Clearinghouse
eric@cec.sped.org
<http://www.cec.sped.org/ericec.htm>

National Association for Gifted Children
<http://www.nagc.org/>

National Research Center on the Gifted and Talented
<http://www.ucc.uconn.edu/~wwwgt/nrcgt.html>

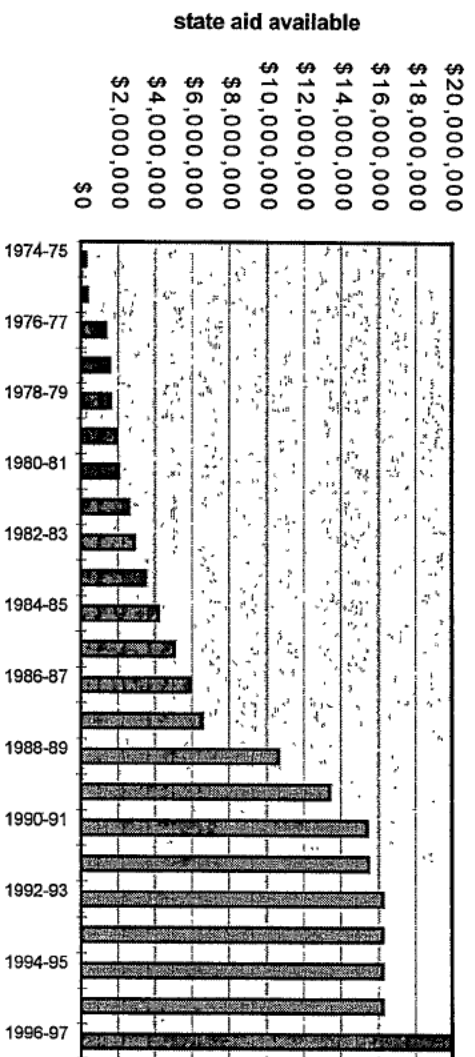
Open Space Communications, Inc. (publishes Understanding Our Gifted magazine)
<http://www.openspacecomm.com/>

MISSOURI SCHOOL IMPROVEMENT PROGRAM STANDARD 8.2

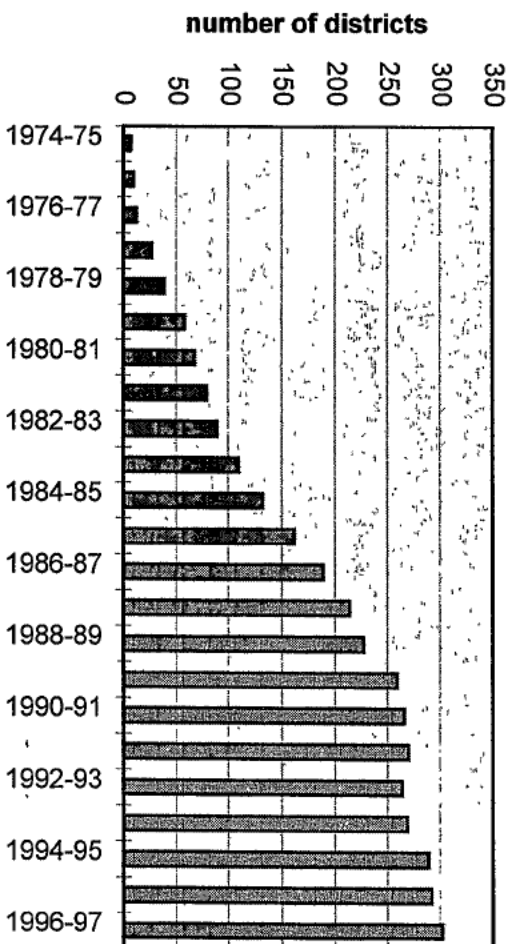
Gifted Education -The district identifies gifted and talented students at all grade levels and provides them differentiated instruction suitable for their levels of intellectual, physical, and social maturity.

- *1. Written procedures are in place to systematically identify gifted and talented students in all grades.
- *2. Gifted educational services are designed to provide identified students with instructional objectives and strategies that are appropriate to their identified needs; and are provided on a continuing basis as these students progress through the grades.

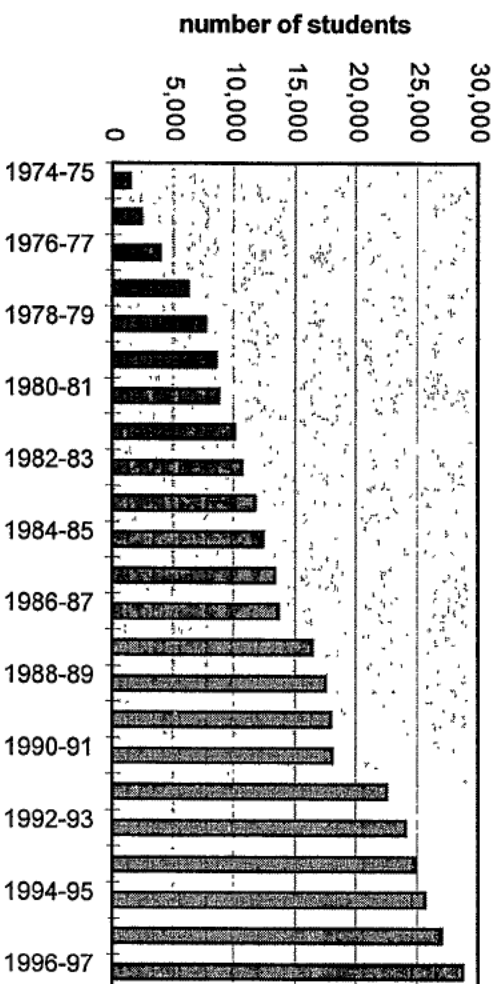
Increase in State Aid



Participating School Districts



Number of Students Participating



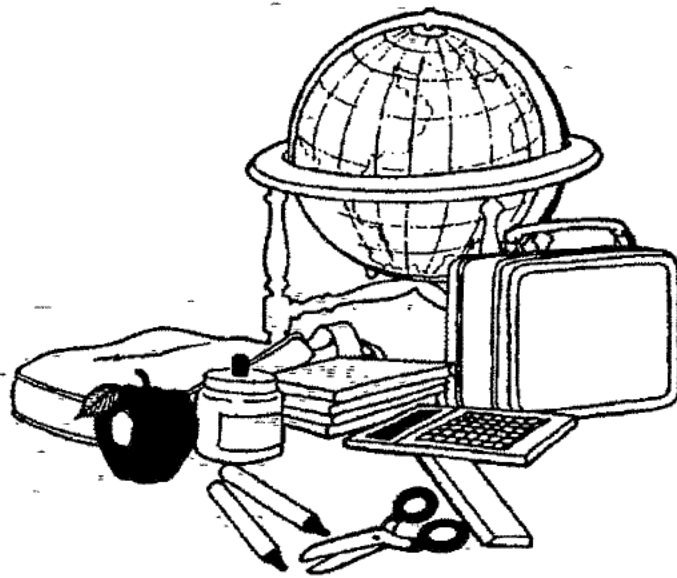
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The model used for this publication was the Ohio Department of Education publication *Navigating the Waters of Change: Charting a New Course of Action to Improve Identification and Services for Children who are Gifted*. The purpose of Ohio's monograph, funded through a Jacob Javits Grant, was to provide information to local school districts in Ohio to assist them in improving the identification of and services for students who are gifted. This provided an excellent guide throughout the publishing process.

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